

## REMARKS

### The Section 112 Rejection.

In the prior response, applicant pointed out that Section 112 requires that the specification (which includes the claims as filed) meet three independent requirements, i.e., (a) the “written description requirement,” (b) the “enablement requirement” and (c) the “best mode requirement,” and noted that the examiner has conceded both (b) that the specification “disclosure as a whole is such as to enable one skilled in the art to make and use the claimed invention,” and (c) that the specification sets forth “the best mode contemplated by the inventor for carrying out that [i.e., the claimed] invention.” *Id.* The examiner has not, and cannot, challenge these assertions.

Claims 1-28 and 35-39 are finally rejected as failing to comply with the written description requirement. In the prior response, applicant noted that the test for compliance with the written description requirement is “whether the subject matter defined in the claims is described in the specification” or whether the claims “are broader than the applicant’s disclosure” *Searle, supra*, at 921, 923. The examiner has not, and can not, challenge applicant’s identification of the legal test.

The legal test requires that “the subject matter defined in the claims” be identified, and that reference to the specification be had to see if the identified invention is described. It is axiomatic that the claims and drawings as filed are part of the specification as filed, and that both the original claims and the drawings may be relied upon in meeting this requirement. (See, e.g., the decisional authority cited at M.P.E.P. § 2163, p. 2100-164, col. 2, last four lines).

With reference, e.g., to Claim 1, the claim defines, by its terms, an article of manufacture comprising in its literal terms a coated substrate. Claim 1 further describes the size and shape of the substrate and the composition of the alternating layers of the coating. Is such an article of manufacture described in the specification. Of course it is! The drawings depict in Figure 2 a substrate 3 and alternating layers 4 and 5 of the coating, and the written description describes these elements in detail.

The examiner's comments with respect to an "intended use limitation" is an oxymoron and reflects an abysmal lack of understanding of the patent laws. It is axiomatic that the intended use of an article of manufacture is not a limitation. *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1305 (Fed. Cir. 1999).

Nomenclature aside, the claimed element is a "substrate" and the phrase "of a size and shape suitable for use as a decorative object ..." clearly modifies and further limits the element "substrate," i.e., the language excludes certain "substrates" such as boats, buildings and tanks that are not of a suitable size and/or shape. This language is clearly not a statement of the intended use of the "substrate" but is a limitation on the physical size and shape thereof. Likewise, the language "selected from the group consisting of gemstones and non-functional ornaments" further limits the class of objects whose size and shape is physically limited.

There is no objection to a group described as "gemstones and ornaments" and thus the objection is that the specification does not describe the admittedly disclosed "objects" as being "non-functional." In this the examiner errs.

By way of example, the Abstract (line 1) and the written description (col. 3, lines 51, 56 and 65 and col. 6, lines 7-9) describes the objects as “decorative” and the specification describes three specific examples of such a “decorative” object,” i.e., a solid “formed with cut and polished facets”<sup>1</sup> (col. 5, line 19), “in the shape of a turtle.” (col. 5, lines 45-46), and “a flat glass” (col. 5, line 41). Clearly, the described invention is not limited to these three specific examples, for the generic invention is described as a “substrate” that has been “previously formed to the desired final shape.” (col. 3, lines 25-27) which may be of any material “capable of being formed into a desired shape” (col. 4, lines 44-45). The examiner has agreed<sup>2</sup> that claims are not limited to the specific examples.

The examiner seeks to require *in haec verba* correspondence between the claims and the specification in repeatedly asserting that the words in the claims are not “disclosed” or expressly “defined.”<sup>3</sup> It is clear that the law is to the contrary and that substantial correspondence between the language of the specification and claims is sufficient. (See M.P.E.P. § 1302.01, p.1300-2).

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<sup>1</sup> Note that this example of a decorative object may be a gemstone, but that it need not be a gemstone, i.e. decorative objects such as paper weights may be have “cut and polished facets.”

<sup>2</sup> Applicant expressly raised this issue and requested that it be advised in the event of a disagreement. None has been forthcoming.

<sup>3</sup> The alternatives suggested by the examiner make no sense if *in haec verba* correspondence is required, i.e., words could not be “defined” without being present or “disclosed.”

The examiner has not made a new matter rejection, yet argues that any attempt to characterize as “non-functional” objects that are described as “decorative” and “formed into a desired shape” such as a “turtle,” and that have a “novel and beautiful appearance” would be new matter (O.A. p.2, ¶ 2(1)). If it is the examiner’s position that one skilled in this art would not understand that the objects described as “decorative” are not “ornamental” or an “adornment” or an “embellishment” or “non-functional”, he should so state.

“Decorative” is defined as “serving or tending to decorate,” and “decorate” is defined as “to furnish or adorn with something ornamental or becoming; embellish”.<sup>4</sup> “Functional” is defined as “having or serving a utilitarian purpose” and “utilitarian” is defined as “having regard to utility or usefulness rather than beauty, ornamentation, etc.”<sup>5</sup> The examiner’s statement that “decorative objects” are functional because their function is to decorate is sheer sophistry. Applicant’s use of the term is supported by the meaning of the words in the English language and the record is clear.

As discussed *supra*, the test for compliance with the written description requirement is “whether the subject matter defined in the claims is described in the specification. The “subject matter” of Claim 1 is, *inter alia*, a coated substrate suitable for use as a non-functional object, i.e., an object that “furnishes or adorns with something

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<sup>4</sup> Webster’s New Universal Unabridged Dictionary, Barnes & Noble 1992

<sup>5</sup> Ibid.

ornamental or becoming” or that “embellishes” and not “having regard to utility or usefulness rather than beauty, ornamentation, etc.”

Is such “subject matter” described in the specification? Of course it is! The described “turtle” is a “non-functional” or “decorative” or “adorned” or “embellished” or “becoming” ornament,” as is the flat surface “with a novel and beautiful appearance”. The legal test is clearly met.

With respect to Claims 13, 27, 40 and 45, it is clear that the written description discloses a decorative object formed by coating a substrate that has been formed into the shape of a turtle. (See Example 2, col. 5, lines 45-46). While the precise shape of the turtle is not disclosed, one skilled in the art of decorative turtles used for adornment or ornamentation rather than its usefulness or utility will know the general shape of such a turtle, *a fortiori* one of skill in this art will know that such a turtle has at least one curved surface and a variable thickness. The very purpose of the inclusion of the turtle as an example was to describe the applicability of the process to objects with such a non-uniform shape. The **inherent** shape of the turtle clearly supports an amendment to the written description to read:

“A substrate composed of lead crystal glass and formed into the shape of a turtle was placed in a chamber and the chamber sealed. As is well known, turtles have plural, non-parallel curved surfaces and hence a variable thickness. The atmosphere . . . ”

With respect to Claims 17 and 28, and to Claim 22, the examiner has misinterpreted the claims. Example 1 and Figure 1 clearly show a gemstone with what one skilled in this art (and probably everyone who has ever seen an engagement ring) will

recognize as a “brilliant” cut. As shown in Figure 1, such cuts have approximately the same dimensions along the horizontal X and Y axis for symmetrical purposes, and generally a dimension in the vertical Z axis. These claims do not require that the object be a cube, i.e., that the object be uniform in its dimension along any one of the three axis.

With respect to Claims 44 and 48, Figure 1 discloses a “brilliant” cut gemstone with dimensions as described *supra*. In addition, and as is well known, the cross-section of a brilliant cut gemstone is generally circular in every horizontal plane.

The examiner expressly states that the disclosure of Figure 1 is limited to a cubic zirconium dioxide, and that the shape of a “turtle” is limited to the lead crystal glass material from which it is made. It is noted that the examiner has cited no authority whatsoever for such novel propositions, i.e., substrate materials other than cubic zirconium dioxide and lead crystal glass are disclosed and claimed without the examiner’s objection, and the asserted relationship between the shape and the material from which the turtle is made is an utter non-sequitur.

Moreover, the law is clearly to the contrary. In *Bilstead v. Wakalopulops*, No.13-1528 decided October 7, 2004 (Federal Circuit), the Court reviewed decisions relating to the written description requirement from 1973 to date citing the following as examples of the support of genus claims by the disclosure of a single species in a predictable art:

claimed “an inert fluid” supported by disclosure of “an inert liquid”; and  
claimed “adheringly applied” supported by disclosure of “applying adhesive”;  
claimed “protein content of at least about that of solvent extracted soybean meal”

was supported by disclosure of “solvent extracted soybean meal with a protein content of about 50%”.

The Federal Circuit stated “disclosure of only identical half-shells was sufficient written description support for a claim encompassing both identical and non-identical half –shells”. Should the examiner persist in such patently untenable positions, applicant requests both the citation of the authority on which the examiner relies and a telephone call to arrange an interview with the examiner’s supervisor Paul J. Thibodeau. This is the second request for this information and for an interview.

Withdrawal of the rejection is required.

#### **The Prior Art Rejection.**

Claims 1-16, 27 and 29-36 are rejected as obvious over Hettich in view of Austin.

The examiner is reminded of the difference between the adequacy of a disclosure in supporting claim language and the “teachings” required for the combination of prior art under Section 103. Here it is the examiner’s burden to show motivation for combining the teachings of the cited patents. He has not met that burden.

Hettich et al. generically disclose the selective reflection/transmission of light at different wavelengths and teach that very high reflecting efficiency may be obtained by the vacuum deposition of plural coating layers on a substrate where one of the alternating layers has a uniform thickness of  $1/4$  wavelength and the other alternating layer has a uniform thickness of  $1/2$  wavelength. The examiner has conceded (O.A. 2/28/02, p. 2) that Hettich et al do not disclose that their method works for curved substrates, non-planar substrates or complex shaped substrates, or either sputtering or

chemical vapor deposition of these uniform thickness layers. The examiner further concedes that Hettich et al do not disclose the coating of the entire surface, the substrates 7, 8 being held flat against holders 6 in Figure 1. Hettich et al is also in fact silent as to the function or non-functional nature of the objects produced.

Austin also generically discloses the selective reflection/transmission of light at different wavelengths and teaches the coating of one surface of moderately curved, non-planar, and complex substrates such as sunglasses and spectacles by plural coating layers where one of the alternating layers are variable in thickness except for the two  $1/4$  wavelength layers adjacent the substrate.

The examiner's assertion that sunglass are an ornament is simply wrong. Sunglasses are clearly functional and are not an object that "furnishes or adorns with something ornamental or becoming" or that "embellishes" and not "having regard to utility or usefulness **rather than** beauty, ornamentation, etc."

The examiner asserts that it would be obvious to combine the "teachings" of Hettich et al and Austin to met the limitations of the claims. Reconsideration is solicited.

With respect, e.g., to Claim 1, Claim 1 is directed to gemstones and non-functional objects. There is no disclosure in either of the cited patents of the production of either gemstones or non-functional objects, and the combination thereof, even if proper, would not meet this limitation.

Claim 1 is directed to an object coated over substantially the entire surface. Austin discloses that the plot illustrated in FIG. 5 was obtained by coating a glass "sheet" (i.e., an article having planar surfaces), and that the coating was deposited on each



surface of the glass "sheet". However, there is no disclosure of the extent to which each surface of the glass sheet is coated. *A fortiori*, there is no disclosure whatsoever of the extent to which the surfaces of an article having a curved surface, or a non-planar article, or a complex-shaped article are coated. Thus, there is no disclosure in either of the cited patents of coating over the entire surface of a substrate, and the combination thereof, even if proper, would not meet this limitation.

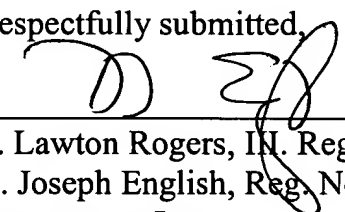
The examiner acknowledges that he has the burden of showing motivation. While the examiner asserts that he has not conceded that the prior art does not show any motivation to combine the "teachings" of these references, the examiner has repeatedly been asked to identify such motivation and has failed to do so. *Res ipsa loquitur*.

Where is the motivation to modify the Hettich et al. high efficiency reflectors by the **anti**-reflective sunglass coatings of Austin?

Reconsideration and withdrawal of the rejection is solicited.

A further and favorable action and allowance of all claims is solicited.

Respectfully submitted,



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